

# MGT 2255 ES Syllabus

Quantitative Analysis for Business, Section ES, 3 credits, Summer 2026

## Instructor Information

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## General Course Information

**Course Description:** MGT 2255 is a course focused on the decision-making processes and strategies of businesses. In the course, we will look at how businesses may employ quantitative concepts and techniques in their decisions, to optimize outcomes. Software tools such as Microsoft Excel will be used extensively throughout the semester during the business cases, and assignments. We will apply quantitative-analytical skills to a wide range of areas such as Supply Chain and Operations Management, Information Technology Management, Finance, Marketing, Accounting, and Strategy. The material is approached from a managerial rather than technical perspective with a focus on how to apply decision technology and how to interpret the results for guiding management action. This is not a course in mathematics. The focus is on the basic structure and logic of the models, not on their mathematical details and proofs.

**Course Learning Outcomes:** Upon successful completion of this course, students will be able to:

1. Apply quantitative methods to business decision-making.
2. Build and solve business models using Excel.
3. Analyze decision, optimization, project, and queuing problems.
4. Interpret regression results and other analytical outputs.
5. Communicate data-driven recommendations in business contexts.

**Required Course Materials:** The required text for this course is the customized e-book Quantitative Analysis for Business (Pearson, 2nd edition; ISBN: 0135318203). Students will use two Pearson online platforms: MyLabOM and MyLabStat. The e-book is embedded in MyLabOM, and registration instructions are available on Canvas. Access may be purchased using either a credit card or an access code. MyLabOM will be used for Homework 3–8, Test 2, Test 3, and the Final Test. MyLabStat will be used for Homework 1–2 and Test 1, and students will be provided with a free access code for MyLabStat. A laptop with Microsoft Excel is required for this course.

**Format of Teaching:** To provide flexibility and support for our diverse student population, including international students and those engaged in internships, this course incorporates elements of remote learning. All lectures will be asynchronous and posted on Canvas for each course module. Students will receive a weekly schedule with clear instructions on what to read, watch, and review in order to master the concepts for that week.

## Grading Policy

Your grade in the course will be based on:

- (1) 8 homework assignments;
- (2) 3 midterm test scores;
- (3) final test score;
- (4) the project management essay;
- (5) 3 quizzes.

The points that can be earned from each of those components are given below and yield a total of 630 points.

- 1.Eight Homework Assignments :160 points
- 2.Three Tests: 300 points
3. Final Test :140 points
4. Project Management Essay :21 points
- 5.Three Quizzes :9 points

The letter grade corresponding with your total points earned is as follows:

- A: 567 and above
- B: 504-566
- C: 441-503
- D: 378-440
- F: 377 and below

**Incomplete Grade:** If serious circumstances arise and appropriate documentation is provided, a student who misses more than one test or the final exam may receive an incomplete grade for the course.

### **Description of Graded Components**

**Homework Policy:** Homework 1 and 2 must be completed through MyLabStat. In addition to submitting your answers on MyLabStat, you must also upload your Excel solutions for Homework 1 and 2 to Canvas. Failure to submit the required Excel file to Canvas will result in a minimum 50% penalty and may result in a score of zero.

Homework 3, 4, 5, 6, 7, and 8 must be completed through MyLabOM. For Homework 4 and 5, you must also upload your Excel solutions for the non-conceptual problems to Canvas in addition to submitting your answers on MyLabOM. Failure to submit the required Excel file to Canvas will result in a minimum 50% penalty and may result in a score of zero.

No late homework will be accepted. Students are welcome to work in groups on homework assignments, and collaboration is encouraged. However, each student must submit their own individual work.

**Project Management Essay:** The Project Management Essay must be submitted through Canvas and should be typed on standard 8½ × 11 paper. No late submissions will be accepted. This is an open-book, open-notes assignment, but it must be completed independently. Any additional instructions or requirements related to homework assignments, quizzes, tests, or the Project Management Essay will be communicated by email prior to the due date.

**Tests and Final Test:** All tests and the final test are open-book/open-notes but must be completed independently. A formula sheet will be provided for each test on Canvas. MyLabStat Test 1 is graded according to MyLabStat rules, and errors in calculation, formatting, interpretation, or earlier parts of a problem may result in no credit. Re-grade requests for Tests 1–3 must be submitted by email between 24 hours and 2 days after the test. No make-up tests or deadline extensions will be granted except in documented emergencies. There are no drop scores and no extra credit in this course.

## Course Policies

**Guidelines for Open-Book Tests:** Open-book tests in this course are designed to assess your ability to apply course concepts independently. You may use course materials posted by the instructor, including slides, lecture videos, notes, formula sheets, practice tests, homework problems, and your own notes. You may not use ChatGPT or other generative AI tools, the internet, or assistance from other people.

**Email Communication:** I will make every effort to respond to emails received on weekdays within 24-36 hours of receipt; emails received on weekends and holidays may result in a longer response time. Please include your first and last name as well as the course and section (e.g., MGT 2255 ES) in the title of your emails.

**Honor Code Statement for Online Tests:** A signed Honor Code Statement should be uploaded to Canvas during the first week of ES term. A template will be provided to you on Canvas to fill out and upload.

**Academic Integrity:** Georgia Tech values trust, honor, and academic integrity. Students are expected to uphold the highest ethical standards, and any suspected violations of the Academic Honor Code will be reported and addressed according to Institute policy.

For information on Georgia Tech's Academic Honor Code, please see The Georgia Institute of Technology 2026-2027 Catalog at <http://www.catalog.gatech.edu>. Refer specifically to section 18b entitled "Academic Honor Code" at <http://www.catalog.gatech.edu/rules/18b.php> for the principles, policies, and procedures governing issues of academic integrity.

**Special Accommodations:** Please obtain a letter from the Office of Disability services and turn it in to me in the beginning of the semester. The Office of Disability services is located in the Smithgall Student Services Building, Suite 220. The phone number is 404-894-9786.

<http://disabilityservices.gatech.edu/>. I want every student to feel supported in this course, and I will be glad to work with you to address your learning needs and help you succeed.

## Core IMPACTS

This course supports the development of core competencies in quantitative reasoning, critical thinking, problem solving, and effective communication. Through business applications and Excel-based analysis, students learn to evaluate alternatives and make informed decisions. These skills prepare students for professional success in business and related fields.

**Student-Faculty Expectations Agreement:** At Georgia Tech, we believe that it is important to strive for an atmosphere of mutual respect, acknowledgement, and responsibility between faculty members and the student body. The Student-Faculty Expectations articulate some basic expectations that you can have of me and that I have of you. In the end, simple respect for knowledge, hard work, and cordial interactions will help build the environment we seek. Therefore, I encourage you to remain committed to the ideals of Georgia Tech while in this class.

**The primary pre-requisite for MGT 2255:** Quantitative Analysis for Business at Georgia Tech is MGT 2250 (Management Statistics). Other acceptable substitutes for MGT 2250 include ECON 2250, ISYE 3030/3770, MATH 3215/3670, or BMED 2400

**Collaboration, Group Work, and Use of Generative AI:** Students are encouraged to use AI as a tool for personal learning, practice, and tutoring. For example, AI may be used to review concepts, receive explanations, ask questions, and support independent study. However, AI may not be used

during tests or exams. All tests and exams must reflect your own independent work and understanding. You are welcome to work in groups on homework assignments, but any work you submit must be your own. All tests and exams are closed book and closed notes, although an equation sheet will be provided.

**Extensions, Late Assignments, & Re-Scheduled/Missed Exams:** Late homework will be penalized accordingly. Make-up exams are given for illness, approved Institute activities or religious observances. Additional rules for tests 1, 2 and 3 and the final exam will be announced by email prior to every test and final exam.